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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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In the Matter of

Application of Ameritech  
Michigan Pursuant to Section  
271 of the Telecommunications  
Act of 1996 to Provide In-  
Region, InterLATA Services in  
Michigan

CC Docket No. 97-1

Volume 1.2:  
Interconnection Agreement between  
Brooks Fiber Communications of Michigan, Inc.  
and  
Ameritech Michigan

**Supplemental Filing**

1. "White Pages Listing and Directory Services Agreement" for Grand Rapids dated September 1, 1995. The "White Pages Listing and Directory Services Agreement for Holland/Zeland dated March 20, 1996" was filed twice in the Initial Filing.
2. Page 1 of Exhibit A to the Interconnection Agreement, titled "Network Element Bona Fide Request."
3. Pages 1 and 2 of the "Calling Name Delivery service Agreement dated June 25, 1996," Exhibit F.

**STATE OF MICHIGAN**  
Michigan Public Service Commission

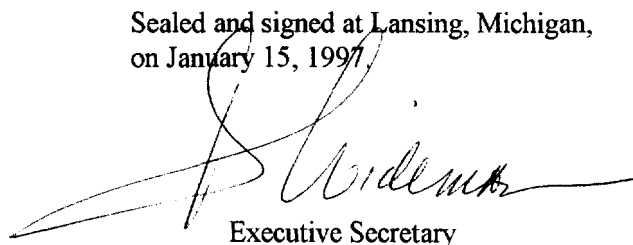
SS.

I, Dorothy Wideman, Executive Secretary of the Michigan Public Service Commission, certify that the attached copy, with the Michigan Public Service Commission seal, filed in Case No. U-11178, of

Ameritech Michigan's December 6, 1996 final Interconnection Agreement between Ameritech Information Industry Services, on behalf of Ameritech Michigan, and Brooks Fiber Communications of Michigan, Inc.,

is a true and correct transcript of the original.

Scaled and signed at Lansing, Michigan,  
on January 15, 1997.



Executive Secretary



Corporate  
6425 S. Pennsylvania Suite 5  
Lansing, MI 48911  
Office: 517/334-3704  
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Paul La Schiazza  
Vice President - Regulatory

December 6, 1996

MICHIGAN PUBLIC SERVICE  
FILED

DEC - 6 1996

COMMISSION

Ms. Dorothy Wideman  
Executive Secretary  
Michigan Public Service Commission  
6545 Mercantile Way, P.O. Box 30221  
Lansing, MI 48909

**Re: MPSC Case No. U-11178**

Dear Ms. Wideman:

Enclosed for filing are an original and 15 copies of the final Interconnection Agreement (Agreement) between Ameritech Information Industry Services, Inc., on behalf of Ameritech Michigan and Brooks Fiber Communications of Michigan, Inc. Pursuant to the Commission's November 26, 1996 Order in the above referenced case, this filing reflects the additional reference to MTA Section 361 in Section 15.0 of the Agreement. The Exhibits to the Agreement include the Telecommunications Services Trial Agreement and other agreements required to be filed by the Commission's November 26, 1996 Order.

If you have any questions, please contact me.

Very truly yours,

PVL/jdg  
Enclosures

cc: Mr. Martin Clift, Jr.  
Mr. Todd Stein

**Case No. U-11178**

**INTERCONNECTION AGREEMENT UNDER SECTIONS 251 AND 252  
OF THE TELECOMMUNICATIONS ACT OF 1996**

**Dated as of August 5, 1996**

**by and between**

**AMERITECH INFORMATION INDUSTRY SERVICES,  
a division of Ameritech Services, Inc.  
on behalf of Ameritech Michigan**

**and**

**BROOKS FIBER COMMUNICATIONS OF MICHIGAN, INC.**

ORIGINAL

**INTERCONNECTION AGREEMENT UNDER SECTIONS 251 AND 252  
OF THE TELECOMMUNICATIONS ACT OF 1996**

Dated as of August 5, 1996

by and between

**AMERITECH INFORMATION INDUSTRY SERVICES,  
a division of Ameritech Services, Inc.  
on behalf of Ameritech Michigan**

and

**BROOKS FIBER COMMUNICATIONS OF MICHIGAN, INC.**

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### Exhibits

Exhibit A            Network Element Bona Fide Request

Exhibit B            Brooks Fiber/Ameritech Fiber-Meet

**INTERCONNECTION AGREEMENT UNDER SECTIONS 251 AND 252  
OF THE TELECOMMUNICATIONS ACT OF 1996**

This Interconnection Agreement under Sections 251 and 252 of the Telecommunications Act of 1996 ("Agreement"), is effective as of the \_\_\_\_\_ day of August 1996 (the "Effective Date"), by and between Ameritech Information Industry Services, a division of Ameritech Services, Inc., a Delaware corporation with offices at 350 North Orleans, Third Floor, Chicago, Illinois 60654, on behalf of Ameritech Michigan ("Ameritech") and Brooks Fiber Communications of Michigan, Inc., a Michigan corporation with offices at 2855 Oak Industrial Drive, NE, Grand Rapids, Michigan 49506 ("Brooks Fiber").

WHEREAS, the Parties want to Interconnect their networks at mutually agreed upon points of interconnection to provide Telephone Exchange Services (as defined below) and Exchange Access (as defined below) to their respective business and residential Customers.

WHEREAS, the Parties are entering into this Agreement to set forth the respective obligations of the Parties and the terms and conditions under which the Parties will Interconnect their networks and provide other services as required by the Act (as defined below) and additional services as set forth herein.

NOW, THEREFORE, in consideration of the mutual provisions contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Brooks Fiber and Ameritech hereby agree as follows:

**1.0 DEFINITIONS**

Capitalized terms used in this Agreement shall have the meanings specified below in this Section 1.0 and as defined elsewhere within this Agreement.

1.1 "Act" means the Communications Act of 1934 (47 U.S.C. § 151 et seq.), as amended by the Telecommunications Act of 1996, and as from time to time interpreted in the duly authorized rules and regulations of the FCC or the Commission having authority to interpret the Act within its state of jurisdiction.

1.2 "ADSL" or "Asymmetrical Digital Subscriber Line" means a transmission technology which transmits an asymmetrical digital signal using one of a variety of line codes.

1.3 "Affiliate" is As Defined in the Act.

1.4 "Agreement for Switched Access Meet Point Billing" means the Agreement for Switched Access Meet Point Billing dated as of April 30, 1996 by and between the Parties.

**1.5** "As Defined in the Act" means as specifically defined by the Act and as from time to time interpreted in the duly authorized rules and regulations of the FCC or the Commission.

**1.6** "As Described in the Act" means as described in or required by the Act and as from time to time interpreted in the duly authorized rules and regulations of the FCC or the Commission.

**1.7** "Automatic Number Identification" or "ANI" means a Feature Group D signaling parameter which refers to the number transmitted through a network identifying the billing number of the calling party.

**1.8** "BLV/BLVI Traffic" means an operator service call in which the caller inquires as to the busy status of or requests an interruption of a call on another Customer's Telephone Exchange Service line.

**1.9** "Calling Party Number" or "CPN" is a Common Channel Interoffice Signaling ("CCIS") parameter which refers to the number transmitted through a network identifying the calling party.

**1.10** "Central Office Switch" means a switch used to provide Telecommunications Services, including, but not limited to:

(a) "End Office Switches" which are used to terminate Customer station Loops for the purpose of Interconnection to each other and to trunks; and

(b) "Tandem Office Switches" or "Tandems" which are used to connect and switch trunk circuits between and among other Central Office Switches.

A Central Office Switch may also be employed as a combination End Office/Tandem Office Switch.

**1.11** "CCS" means one hundred (100) call seconds.

**1.12** "CLASS Features" means certain CCIS-based features available to Customers including, but not limited to: Automatic Call Back; Call Trace; Caller Identification and related blocking features; Distinctive Ringing/Call Waiting; Selective Call Forward; and Selective Call Rejection.

**1.13** "Collocation" means an arrangement whereby one Party's (the "Collocating Party") facilities are terminated in its equipment necessary for Interconnection or for access to Network Elements on an unbundled basis which has been installed and maintained at the premises of a second Party (the "Housing Party"). For purposes of Collocation, the "premises" of a Housing Party is limited to an occupied structure or portion thereof in which such Housing Party has the exclusive right of occupancy. Collocation may be "physical" or "virtual". In "Physical Collocation," the Collocating Party installs and maintains its own equipment in the Housing Party's premises. In "Virtual Collocation," the Housing Party installs and maintains the Collocating Party's equipment in the Housing Party's premises.

**1.14** "Commission" or "MPSC" means the Michigan Public Service Commission.

**1.15** "Common Channel Interoffice Signaling" or "CCIS" means the signaling system, developed for use between switching systems with stored-program control, in which all of the signaling information for one or more groups of trunks is transmitted over a dedicated high-speed data link rather than on a per-trunk basis and, unless otherwise agreed by the Parties, the CCIS used by the Parties shall be SS7.

**1.16** "Cross Connection" means a connection provided pursuant to Collocation at the Digital Signal Cross Connect, Main Distribution Frame or other suitable frame or panel between (i) the Collocating Party's equipment and (ii) the equipment or facilities of the Housing Party.

**1.17** "Customer" means a third-party residence or business that subscribes to Telecommunications Services provided by either of the Parties.

**1.18** "Dialing Parity" is As Defined in the Act. As used in this Agreement, "Local Dialing Parity" means the ability of Telephone Exchange Service Customers of one LEC to place local calls to Telephone Exchange Service Customers of another LEC, without the use of any access code and with no unreasonable dialing delay.

**1.19** "Digital Signal Level" means one of several transmission rates in the time-division multiplex hierarchy.

**1.20** "Digital Signal Level 0" or "DS0" means the 64 kbps zero-level signal in the time-division multiplex hierarchy.

**1.21** "Digital Signal Level 1" or "DS1" means the 1.544 Mbps first-level signal in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS1 is the initial level of multiplexing.

**1.22** "Digital Signal Level 3" or "DS3" means the 44.736 Mbps third-level in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS3 is defined as the third level of multiplexing.

**1.23** "Exchange Message Record" or "EMR" means the standard used for exchange of Telecommunications message information among Telecommunications providers for billable, non-billable, sample, settlement and study data. EMR format is contained in Bellcore Practice BR-010-200-010 CRIS Exchange Message Record.

**1.24** "Exchange Access" is As Defined in the Act.

**1.25** "Exchange Area" means an area, approved by the Commission, for which a distinct local rate schedule is in effect.

**1.26** "FCC" means the Federal Communications Commission.

**1.27** "Fiber-Meet" means an Interconnection architecture method whereby the Parties physically Interconnect their networks via an optical fiber interface (as opposed to an electrical interface) at a mutually agreed upon location.

**1.28** "HDSL" or "High-Bit Rate Digital Subscriber Line" means a transmission technology which transmits up to a DS1-level signal, using any one of the following line codes: 2 Binary / 1 Quaternary ("2B1Q"), Carrierless AM/PM, Discrete Multitone ("DMT"), or 3 Binary / 1 Octel ("3B1O").

**1.29** "Incumbent Local Exchange Carrier" or "ILEC" is As Defined in the Act.

**1.30** "Integrated Digital Loop Carrier" means a subscriber loop carrier system that is twenty-four (24) local Loop transmission paths combined into a 1.544 Mbps digital signal which integrates within the switch at a DS1 level.

**1.31** "Interconnection" is As Described in the Act.

**1.32** "Interexchange Carrier" or "IXC" means a carrier that provides, directly or indirectly, interLATA or intraLATA Telephone Toll Services.

**1.33** "Interim Telecommunications Number Portability" or "INP" is As Described in the Act.

**1.34** "InterLATA" is As Defined in the Act.

**1.35** "Integrated Services Digital Network" or "ISDN" means a switched network service that provides end-to-end digital connectivity for the simultaneous transmission of voice and data. Basic Rate Interface-ISDN (BRI-ISDN) provides for a digital transmission of two 64 kbps bearer channels and one 16 kbps data channel (2B+D).

**1.36** "IntraLATA Toll Traffic" means all intraLATA calls other than Local Traffic but including interzone calls.

**1.37** "Local Access and Transport Area" or "LATA" is As Defined in the Act.

**1.38** "Local Traffic" means those calls as defined by Ameritech's local calling areas, as described in maps, tariffs, or rate schedules filed with and approved by the Commission as of the date of this Agreement.

**1.39** "Local Exchange Carrier" or "LEC" is As Defined in the Act.

**1.40** "Local Loop Transmission" or "Loop" means the entire transmission path which extends from the network interface or demarcation point at a Customer's premises to the Main Distribution Frame or other designated frame or panel in a Party's Wire Center which serves the Customer. Loops are defined by the electrical interface rather than the type of facility used.

**1.41** "Losses" means any and all losses, costs (including court costs), claims, damages (including fines, penalties, and criminal or civil judgments and settlements), injuries, liabilities and expenses (including attorneys' fees).

**1.42** "Main Distribution Frame" means the distribution frame of the Party providing the Loop used to interconnect cable pairs and line and trunk equipment terminals on a switching system.

**1.43** "Meet-Point Billing" means the process whereby each Party bills the appropriate tariffed rate for its portion of a jointly provided Switched Exchange Access Service as agreed to in the Agreement for Switched Access Meet Point Billing.

**1.44** "Network Element" is As Defined in the Act.

**1.45** "Network Element Bona Fide Request" means the process described on Exhibit A that prescribes the terms and conditions relating to a Party's request that the other Party provide a Network Element not otherwise provided by the terms of this Agreement.

**1.46** "North American Numbering Plan" or "NANP" means the numbering plan used in the United States that also serves Canada, Bermuda, Puerto Rico and certain Caribbean Islands. The NANP format is a 10-digit number that consists of a 3-digit NPA code (commonly referred to as the area code), followed by a 3-digit NXX code and 4-digit line number.

**1.47** "Number Portability" is As Defined in the Act.

**1.48** "NXX" means the three-digit code which appears as the first three digits of a seven digit telephone number.

**1.49** "Party" means either Ameritech or Brooks Fiber, and "Parties" means Ameritech and Brooks Fiber.

**1.50** "Port" means a termination on a Central Office Switch that permits Customers to send or receive Telecommunications over the public switched network, but does not include switch features or switching functionality.

**1.51** "Rate Center" means the specific geographic point which has been designated by a given LEC as being associated with a particular NPA-NXX code which has been assigned to the LEC for its provision of Telephone Exchange Service. The Rate Center is the finite geographic point identified by a specific V&H coordinate, which is used by that LEC to measure, for billing purposes, distance sensitive transmission services associated with the specific Rate Center; provided that a Rate Center cannot exceed the boundaries of an Exchange Area as approved by the Commission.

**1.52** "Reciprocal Compensation" is As Described in the Act.

**1.53** "Routing Point" means a location which a LEC has designated on its own network as the homing (routing) point for inbound traffic to one or more of its NPA-NXX codes. The Routing Point is also used to calculate mileage measurements for the distance-sensitive transport element charges of Switched Exchange Access Services. Pursuant to Bell Communications Research, Inc. ("Bellcore") Practice BR 795-100-100 (the "Bellcore Practice"), the Routing Point (referred to as the "Rating Point" in such Bellcore Practice) may be an End Office Switch location, or a "LEC Consortium Point of Interconnection." Pursuant to such Bellcore Practice, each "LEC Consortium Point of Interconnection" shall be designated by a common language location identifier (CLLI) code with (x)KD in positions 9, 10, 11, where (x) may be any alphanumeric A-Z or 0-9. The Routing Point must be located within the LATA in which the corresponding NPA-NXX is located. However, Routing Points associated with each NPA-NXX need not be the same as the corresponding Rate Center, nor must there be a unique and separate Routing Point corresponding to each unique and separate Rate Center; provided that the Routing Point associated with a given NPA-NXX must be located in the same LATA as the Rate Center associated with the NPA-NXX.

**1.54** "Service Control Point" or "SCP" means a Signaling End Point that acts as a database to provide information to another signaling end point (i.e., Service Switching Point or another SCP) for processing or routing certain types of network calls. A query/response mechanism is typically used in communicating with an SCP.

**1.55** "Signaling End Point" or "SEP" means a signaling point, other than an STP, which serves as a source or a repository for CCIS messages.



**1.56** "Signaling Transfer Point" or "STP" means a signaling point that performs message routing functions and provides information for the routing of messages between SEPs. An STP transmits, receives and processes CCIS messages.

**1.57** "Switched Exchange Access Service" means the offering of transmission or switching services to Telecommunications Carriers for the purpose of the origination or termination of Telephone Toll Service. Switched Exchange Access Services include: Feature Group A, Feature Group B, Feature Group D, 800/888 access, and 900 access and their successors or similar Switched Exchange Access Services.

**1.58** "Synchronous Optical Network" or "SONET" means an optical interface standard that allows inter-networking of transmission products from multiple vendors. The base rate is 51.84 Mbps (OC-1/STS-1) and higher rates are direct multiples of the base rate, up to 13.22 Gpbs.

**1.59** "Technically Feasible Point" is As Described in the Act.

**1.60** "Telecommunications" is As Defined in the Act.

**1.61** "Telecommunications Act" means the Telecommunications Act of 1996 and any rules and regulations promulgated thereunder.

**1.62** "Telecommunications Carrier" is As Defined in the Act.

**1.63** "Telecommunications Service" is As Defined in the Act.

**1.64** "Telephone Exchange Service" is As Defined in the Act.

**1.65** "Telephone Toll Service" is As Defined in the Act.

**1.66** "Wire Center" means the occupied portion of a structure in which a Party has the exclusive right of occupancy and which serves as a Routing Point for Switched Exchange Access Service.

## **2.0 INTERPRETATION AND CONSTRUCTION**

All references to Sections, Exhibits and Schedules shall be deemed to be references to Sections of, and Exhibits and Schedules to, this Agreement unless the context shall otherwise require. The headings of the Sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement. Unless the context shall otherwise require, any reference to any agreement, other instrument (including Ameritech or other third party offerings, guides or practices), statute, regulation, rule or tariff is to such agreement, instrument, statute, regulation, rule or tariff as amended and supplemented

from time to time (and, in the case of a statute, regulation, rule or tariff, to any successor provision). In the event of a conflict or discrepancy between the provisions of this Agreement and the Act, the provisions of the Act shall govern.

### **3.0 IMPLEMENTATION SCHEDULE AND INTERCONNECTION ACTIVATION DATES**

Subject to the terms and conditions of this Agreement, Interconnection of the Parties' facilities and equipment pursuant to Section 4.0 for the transmission and routing of Telephone Exchange Service traffic and Exchange Access traffic shall be established on or before the corresponding "Interconnection Activation Date" shown for each such LATA on Schedule 3.0. Schedule 3.0 may be revised and supplemented from time to time upon the mutual agreement of the Parties to reflect the Interconnection of additional LATAs pursuant to Section 4.4 by attaching one or more supplementary schedules to such schedule.

### **4.0 INTERCONNECTION PURSUANT TO SECTION 251(c)(2)**

#### **4.1 Scope**

Section 4.0 describes the physical architecture for Interconnection of the Parties' facilities and equipment for the transmission and routing of Telephone Exchange Service traffic and Exchange Access traffic between the respective business and residential Customers of the Parties pursuant to Section 251(c)(2) of the Act. Each Party shall make available to the other Party the same Interconnection methods on the same rates, terms and conditions as described herein. Sections 5.0 and 6.0 prescribe the specific logical trunk groups (and traffic routing parameters) which will be configured over the physical connections described in this Section 4.0 related to the transmission and routing of Telephone Exchange Service traffic and Exchange Access traffic, respectively. Other trunk groups, as described in this Agreement, may be configured using this architecture.

#### **4.2 Interconnection Points and Methods**

4.2.1 In each LATA identified on Schedule 3.0, Brooks Fiber and Ameritech shall Interconnect their networks at the correspondingly identified Ameritech and Brooks Fiber Wire Centers on Schedule 3.0 for the transmission and routing of Telephone Exchange Service traffic and Exchange Access traffic within that LATA pursuant to Section 251(c)(2) of the Act.

4.2.2 Interconnection in each LATA shall be accomplished through either (i) a Fiber-Meet as provided in Section 4.3, (ii) Collocation as provided in Section 12.0, (iii) any other Interconnection method provided by applicable tariff, law, rule or regulation, subject to Section 251(c)(2)(B) or (iv) any other Interconnection method to which the Parties may agree in advance of the applicable Interconnection Activation Date for a given LATA.

4.2.3 In addition to any other Interconnection method provided herein, Ameritech shall provide Brooks Fiber Interconnection through tie-cable interconnection in Ameritech's Grand Rapids Bell Central Office and Holland Central Office, as described in Tariff M.P.S.C. No. 20R, Section 2.L.E and in accordance with the terms, conditions and limitations of that certain Settlement Agreement and Release dated April 8, 1996 by and between the Parties (the "Settlement Agreement").

#### 4.3 Fiber-Meet

4.3.1 If the Parties Interconnect their networks pursuant to a Fiber-Meet, the Parties shall jointly engineer and operate a single Synchronous Optical Network ("SONET") transmission system. The Parties shall jointly determine and agree upon the specific Optical Line Terminating Multiplexor ("OLTM") equipment to be utilized at each end of the SONET transmission system. If the Parties cannot agree on the OLTM, the following decision criteria shall apply to the selection of the OLTM:

- (a) First, the type of OLTM equipment utilized by both Parties within the LATA. Where more than one type of OLTM equipment is used in common by the Parties within the LATA, the Parties shall choose the OLTM equipment in accordance with subsection (c) below;
- (b) Second, the type of OLTM equipment utilized by both Parties anywhere outside the LATA. Where more than one type of OLTM equipment is used in common by the Parties outside the LATA, the Parties shall choose the OLTM equipment in accordance with subsection (c) below; and
- (c) Third, the Party first selecting the type of OLTM equipment shall be determined by lot and the choice to select such OLTM equipment shall thereafter alternate between the Parties.

If Brooks Fiber does not utilize the type of OLTM equipment chosen by Ameritech, Ameritech shall assist Brooks Fiber in procuring such OLTM equipment by making available to Brooks Fiber any available Ameritech discounts from the applicable vendor.

4.3.2 Ameritech shall, wholly at its own expense, procure, install and maintain the agreed upon OLTM equipment in the Ameritech Interconnection Wire Center ("AIWC") identified for each LATA set forth on Schedule 3.0, in capacity sufficient to provision and maintain all logical trunk groups prescribed by Sections 5.0 and 6.0.

4.3.3 Brooks Fiber shall, wholly at its own expense, procure, install and maintain the agreed upon OLTM equipment in the Brooks Fiber Interconnection Wire Center ("BIWC") identified for that LATA in Schedule 3.0, in capacity sufficient to provision and maintain all logical trunk groups prescribed by Sections 5.0 and 6.0.

4.3.4 Ameritech shall designate a manhole or other suitable entry-way immediately outside the AIWC as a Fiber-Meet entry point, and shall make all necessary preparations to receive, and to allow and enable Brooks Fiber to deliver, fiber optic facilities into that manhole with sufficient spare length to reach the OLT equipment in the AIWC. Brooks Fiber shall deliver and maintain such strands wholly at its own expense.

4.3.5 Brooks Fiber shall designate a manhole or other suitable entry-way immediately outside the BIWC as a Fiber-Meet entry point, and shall make all necessary preparations to receive, and to allow and enable Ameritech to deliver, fiber optic facilities into that manhole with sufficient spare length to reach the OLT equipment in the BIWC. Ameritech shall deliver and maintain such strands wholly at its own expense.

4.3.6 Brooks Fiber shall pull the fiber optic strands from the Brooks Fiber-designated manhole/entry-way into the BIWC and through appropriate internal conduits Brooks Fiber utilizes for fiber optic facilities and shall connect the Ameritech strands to the OLT equipment Brooks Fiber has installed in the BIWC.

4.3.7 Ameritech shall pull the fiber optic strands from the Ameritech-designated manhole/entry-way into the AIWC and through appropriate internal conduits Ameritech utilizes for fiber optic facilities and shall connect the Brooks Fiber strands to the OLT equipment Ameritech has installed in the AIWC.

4.3.8 Each Party shall use its best efforts to ensure that fiber received from the other Party will enter that Party's Wire Center through a point separate from that which the Party's own fiber exited.

4.3.9 Each Party shall have exclusive use of fifty percent (50%) of the OLT equipment capacity. If either Party should exhaust its capacity in any particular OLT equipment, that Party shall notify the other Party and request additional bandwidth. Such other Party may elect to provide the first Party additional bandwidth from its allocation of capacity in the OLT, or the Parties shall upgrade or expand the SONET transmission system equipment as provided in this Section 4.0 and in the Grooming Plan (as defined in Section 8.1).

4.3.10 Unless otherwise mutually agreed, this SONET transmission system shall be configured as illustrated in Exhibit B, and engineered, installed, and maintained as described in this Section 4.0 and in the Grooming Plan.

4.3.11 Interconnection shall be at least equal in quality to that provided by the Parties to themselves or any subsidiary, Affiliate or third party. For purposes of this Section 4.3.11, "equal in quality" means the same or equivalent interface specifications, installation and repair intervals.

4.3.12 Each Party shall ensure that each Tandem connection permits the completion of traffic to all End Offices which subtend that Tandem. Pursuant to Section 5.0, each Party shall establish and maintain separate trunk groups connected to each Tandem of the other Party which serves, or is sub-tended by End Offices which serve, such other Party's Customers within the Exchange Areas served by such Tandem Switches.

4.3.13 For Fiber-Meet arrangements, each Party will be responsible for providing its own transport facilities to the Fiber-Meet in accordance with the Grooming Plan.

#### **4.4 Interconnection in Additional LATAs**

4.4.1 If Brooks Fiber determines to offer Telephone Exchange Services in any other LATA in which Ameritech also offers Telephone Exchange Services, Brooks Fiber shall provide written notice to Ameritech of the need to establish Interconnection in such LATA pursuant to this Agreement.

4.4.2 The notice provided in Section 4.4.1 shall include (i) the initial Routing Point Brooks Fiber has designated in the new LATA; (ii) Brooks Fiber's requested Interconnection Activation Date; and (iii) a non-binding forecast of Brooks Fiber's trunking requirements.

4.4.3 Unless otherwise agreed by the Parties, the Parties shall designate the Wire Center Brooks Fiber has identified as its initial Routing Point in the LATA as the BIWC in that LATA and shall designate the Ameritech Tandem Office Wire Center within the LATA nearest to the BIWC (as measured in airline miles utilizing the V&H coordinates method) as the AIWC in that LATA.

4.4.4 Unless otherwise agreed by the Parties, the Interconnection Activation Date in each new LATA shall be the earlier of (i) the date mutually agreed by the Parties and (ii) the date that is one-hundred fifty (150) days after the date on which Brooks Fiber delivered notice to Ameritech pursuant to Section 4.4.1. Within ten (10) business days of Ameritech's receipt of Brooks Fiber's notice, Ameritech and Brooks Fiber shall confirm the AIWC, the BIWC and the Interconnection Activation Date for the new LATA by attaching a supplementary schedule to Schedule 3.0.

#### **4.5 Technical Specifications**

4.5.1 Brooks Fiber and Ameritech shall work cooperatively to install and maintain a reliable network. Brooks Fiber and Ameritech shall exchange appropriate information (e.g., maintenance contact numbers, network information, information required to comply with law enforcement and other security agencies of the government and such other information as the Parties shall mutually agree) to achieve this desired reliability.

4.5.2 Brooks Fiber and Ameritech shall work cooperatively to apply sound network management principles by invoking network management controls to alleviate or to prevent congestion.

4.5.3 The following publications describe the practices, procedures, specifications and interfaces generally utilized by Ameritech and are listed herein to assist the Parties in meeting their respective responsibilities related to Electrical/Optical Interfaces:

- (a) Bellcore Technical Publication TR-INS-000342; High Capacity Digital Special Access Service, Transmission Parameter Limits and Interface Combinations;
- (b) Ameritech Technical Publication AM-TR-NIS-000111; Ameritech OC3, OC12 and OC48 Service Interface Specifications; and
- (c) Ameritech Technical Publication AM-TR-NIS-000133; Ameritech OC3, OC12 and OC48 Dedicated Ring Service Interface Specifications.

#### **4.6 Implementation**

The Parties shall take all action necessary to implement Interconnection by the applicable Interconnection Activation Date in accordance with the terms and conditions of this Agreement (including the Grooming Plan).

### **5.0 TRANSMISSION AND ROUTING OF TELEPHONE EXCHANGE SERVICE TRAFFIC PURSUANT TO SECTION 251(c)(2)**

#### **5.1 Scope of Traffic**

Section 5.0 prescribes parameters for trunk groups (the "Local/IntraLATA Trunks") to be effected over the Interconnections specified in Section 4.0 for the transmission and routing of Local Traffic and IntraLATA Toll Traffic between the Parties' respective Telephone Exchange Service Customers.

#### **5.2 Switching System Hierarchy**

5.2.1 For purposes of this Section 5.0, each of the following Central Office Switches shall be designated as a "Primary Switch":

- (a) Each access Tandem Ameritech operates in the LATA;
- (b) The initial switch Brooks Fiber employs to provide Telephone Exchange Service in the LATA;

- (c) Any access Tandem Brooks Fiber may establish for provision of Exchange Access in the LATA; and
- (d) Any additional switch Brooks Fiber may subsequently employ to provide Telephone Exchange Service in the LATA which Brooks Fiber may at its sole option designate as a Primary Switch; provided that the total number of Brooks Fiber Primary Switches for a LATA may not exceed the total number of Ameritech's Primary Switches for that LATA. To the extent Brooks Fiber chooses to designate any additional switch as a Primary Switch, it shall provide notice to Ameritech of such designation at least ninety (90) days in advance of the date on which Brooks Fiber activates such switch as a Primary Switch.

5.2.2 Each Central Office Switch operated by the Parties which is not designated as a Primary Switch pursuant to Section 5.2.1 shall be designated as a "Secondary Switch".

5.2.3 For purposes of Brooks Fiber routing traffic to Ameritech, sub-tending arrangements between Ameritech Primary Switches and Ameritech Secondary Switches shall be the same as the access Tandem/End Office sub-tending arrangements which Ameritech maintains for those switches. For purposes of Ameritech routing traffic to Brooks Fiber, sub-tending arrangements between Brooks Fiber Primary Switches and Brooks Fiber Secondary Switches shall be the same as the access Tandem/End Office sub-tending arrangements which Brooks Fiber maintains for those switches.

5.2.4 Either Party may unilaterally reclassify its Central Office Switch as either a Primary Switch or Secondary Switch, as the case may be; provided that such Party provides the other Party written notice thereof not less than one hundred and eighty (180) days prior to such reclassification.

### 5.3 Trunk Group Architecture and Traffic Routing

The Parties shall jointly engineer and configure Local/IntraLATA Trunks over the physical Interconnection arrangements as follows:

5.3.1 The Local/IntraLATA Trunks shall be configured over either one-way trunks or two-way trunks, as agreed upon by the Parties not less than thirty (30) days (or such longer period as the Parties may agree upon) prior to any applicable Interconnection Activation Date. Each trunk group shall be provisioned as a direct transmission path between each Brooks Fiber Primary Switch and each Ameritech Primary Switch.

5.3.2 Notwithstanding anything to the contrary in this Section 5.0, if the two-way traffic volumes between any two Central Office Switches (whether Primary-Primary, Primary-Secondary or Secondary-Secondary) at any time exceeds the traffic volume threshold as set forth in the Grooming Plan, the Parties shall within sixty (60) days after such occurrence establish direct trunk groups to the applicable End Office(s), consistent with the grades of service and quality parameters set forth in the Grooming Plan; provided nothing in this Section 5.3 shall require a Party to establish new direct trunk groups to the End Office(s) on or before the date which is one hundred and twenty (120) days after the applicable Interconnection Activation Date; provided, however, that if such traffic volume threshold is exceeded within such one hundred and twenty (120) day period, such Party shall establish such direct trunk groups on the date which is the later of (i) sixty (60) days after such occurrence or (ii) one hundred and twenty-one (121) days after the Interconnection Activation Date.

## 5.4 Signaling

5.4.1 Where available, CCIS signaling shall be used by the Parties to set up calls between the Parties' Telephone Exchange Service networks. If CCIS signaling is unavailable, MF (Multi-Frequency) signaling shall be used by the Parties. Each Party shall charge the other Party for CCIS signaling in accordance with its applicable tariffs. During the term of this Agreement neither Party shall charge the other Party additional usage-sensitive rates for SS7 queries (Transactional Capabilities Application Part ("TCAP") and ISUP) made for Local Traffic.

5.4.2 The following publications describe the practices, procedures and specifications generally utilized by Ameritech for signaling purposes and are listed herein to assist the Parties in meeting their respective responsibilities related to Signaling:

- (a) Bellcore Special Report SR-TSV-002275, BOC Notes on the LEC Networks - Signaling.
- (b) Ameritech Supplement AM-TR-OAT-000069, Common Channel Signaling Network Interface Specifications.

5.4.3 The Parties will cooperate on the exchange of Transactional Capabilities Application Part (TCAP) messages to facilitate interoperability of CCIS-based features between their respective networks, including all CLASS features and functions, to the extent each Party offers such features and functions to its Customers. All CCIS signaling parameters will be provided including, without limitation, calling party number (CPN), originating line information (OLI), calling party category and charge number.

5.4.4 Where available and upon the request of the other Party, each Party shall cooperate to ensure that its trunk groups are configured utilizing the B8ZS ESF protocol for 64



kpbs clear channel transmission to allow for ISDN interoperability between the Parties' respective networks.

### **5.5 Grades of Service**

The Parties shall initially engineer and shall jointly monitor and enhance all trunk groups consistent with the Grooming Plan.

### **5.6 Measurement and Billing**

5.6.1 For billing purposes, to differentiate between Local Traffic and IntraLATA Toll Traffic transmitted and routed over the Local/IntraLATA Trunks, each Party shall pass available signal or message information, including Calling Party Number (CPN) information, on each call carried over the Local/IntraLATA Trunks. All calls exchanged without such identifiers shall be billed as either Local Traffic or IntraLATA Toll Traffic in accordance with a statistical methodology to be agreed upon by the Parties.

5.6.2 Measurement of Telecommunications traffic billed hereunder shall be (i) in actual conversation seconds for Local Traffic and (ii) in accordance with applicable tariffs for all other types of Telecommunications traffic.

### **5.7 Reciprocal Compensation Arrangements — Section 251(b)(5)**

5.7.1 Reciprocal Compensation applies for the transport and termination of Local Traffic billable by Ameritech or Brooks Fiber which a Telephone Exchange Service Customer originates on Ameritech's or Brooks Fiber's network for termination on the other Party's network. The Parties shall compensate each other for such transport and termination of Local Traffic at the rate set forth in the Pricing Schedule. If Brooks Fiber avails itself pursuant to Section 28.15 of different rates, terms and conditions and such rates, terms and conditions provide a rate for the transport and termination of Local Traffic, the Parties agree that such rate shall apply to each Party's transport and termination of Local Traffic.

5.7.2 The Reciprocal Compensation arrangements set forth in this Agreement are not applicable to Switched Exchange Access Service. All Switched Exchange Access Service and all IntraLATA Toll Traffic shall continue to be governed by the terms and conditions of the applicable federal and state tariffs.

5.7.3 Each Party shall charge the other Party its effective tariffed intraLATA FGD switched access rates for the transport and termination of all IntraLATA Toll Traffic.

5.7.4 Compensation for transport and termination of all traffic which has been subject to performance of INP by one Party for the other Party pursuant to Section 13.0 shall be as specified in Section 13.6.